

DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES**APPLICATION FOR GRANT**

Please read the attached description of the Darwin Initiative before completing this form. Give a full answer to each section; applicants will be considered on the basis of information submitted on this form. Applicants are asked not to use the form supplied to cross refer to information in separate documents. The space provided indicates the level of detail required but you may provide additional information on a separate sheet if necessary. You are asked also to complete the summary sheet attached at the end of this form. Although you may reproduce it in a reasonable font, you should not expand it to more than an A4 sheet as additional information will not be taken into account.

1. DETAILS OF APPLICANT**1.1 Name of organisation applying**

Botanic Gardens Conservation International

1.2 Address for correspondence

[Redacted]

1.3 Person who may be contacted about this application, and position in organisation.

Dr Peter Wyse Jackson. Secretary General.

1.4 Telephone and FAX numbers

[Redacted]

1.5 Nature of the organisation (eg is it an academic institution, a registered charity, company limited by guarantee?)

BGCI is a registered charity (No. 328475)

1.6 Describe briefly the aims, activities and structure of your organisation:

Aims: To conserve wild plant species through the actions of botanic gardens: to raise environmental awareness amongst the public about the importance of plants.

Activities: establishment of networks, creation of databases on endangered species, publication of newsletters, guide-lines and technical information, development of environmental education programmes.

Structure (enclose chart if appropriate): BGCI is a U.K. registered charity, managed by a Board of Trustees. There are four full-time staff and four part-time staff in the U.K. Its membership includes over 500 botanic gardens and other institutions in 106 countries.

1.7 Provide brief details of the relevant past experience and achievements of the person to be responsible for the activities for which funding is sought. (This will normally be either the person completing this form or the contact at Section 1.3)

Dr Peter Wyse Jackson has worked for BGCI since its creation in 1987. He has helped to build and manage the BGCI network of member organizations world-wide and has steered BGCI's scientific programmes for some years. He has considerable experience in advising individual institutions on infrastructure development and plant conservation programmes in many countries, especially in developing countries. His most recent work has been with institutions in Brazil, the Caribbean, Colombia and Vietnam. He edits the BGCI's main journals, including *Botanic Gardens Conservation News* and the *Boletín de los Jardines Botánicos de América Latina* and worked with the Colombian botanic gardens and national biodiversity institute, the Instituto Alexander Von Humboldt in 1996 to help develop a national strategy for botanic gardens in biodiversity conservation. He has been involved in Darwin Initiative training projects on information systems in several countries including Indonesia, Russia, Ukraine.

1.8 Have you received funding under the Initiative before? If so, please give details.

Yes, BGCI has received Darwin Initiative for six projects previously. In 1993 we received support to strengthen networks of botanic gardens in developing countries. In 1995 projects were funded to develop a biodiversity information system for Indonesian botanic gardens and to hold an education training course in China and in 1996 two projects were supported to develop biodiversity information systems in botanic gardens of the former Soviet Union and for the preparation of a technical manual for botanic gardens. In 1997 BGCI received support for the development of sustainable utilization systems of plants in a new National Park in Vietnam.

1.9 How did you learn about the Initiative?

From many sources.

1.10 Geographical coverage of the organisation as a whole.

World-wide. BGCI operates in over 100 countries.

1.11 A brief description of the organisation's recent achievements. (Please note that while short pamphlets may be useful, the Department does not wish to receive books or lengthy reports.)

BGCI has prepared, published and is working to implement important strategic and policy documents and manuals, such as *The Botanic Gardens Conservation Strategy* and a new *Strategy for Environmental Education in Botanic Gardens*. BGCI has succeeded in uniting botanic gardens as a world network for plant conservation; and created or strengthened national botanic garden programmes and actions in many countries and regions such as Australia, Brazil, China, Europe, Indonesia, Russia and the U.K. BGCI has organized major meetings, workshops and training courses, such as a series of International Botanic Gardens Congresses and educational courses in China, Colombia and Mexico. It has developed a computer database on the rare plants held by over 300 institutions to co-ordinate their conservation world-wide. It has advised on and installed new plant record management systems for many institutions. Its education programme has become an important means to enhance the role of gardens in environmental education and awareness and it has produced and distributed a wide range of educational materials, such as videos, a slide pack, posters and newsletters, in several languages.

2. PROJECT DETAILS

It is important that applicants set out precisely their objectives and the activities of their proposal. Please be as explicit as possible.

2.1 How has the need for the work been identified? How is the project related to conservation priorities in the host country(ies)? How is the project intended to assist the host country with its obligations under the Biodiversity Convention?

Colombia is one of the countries with the highest biological diversity worldwide, with some 40,000 species of vascular plants recorded. The country's sixteen botanic gardens are widely recognized as of considerable actual and potential importance to safeguarding these plant resources, not only through their cultivation of important and extensive collections of native plants for conservation but also through diverse activities in botanical research, exploration and education. BGCI is seeking support from the Darwin Initiative to initiate and develop programmes to enhance their effectiveness as centres for the conservation of biological diversity. One of the obligations of the parties to the Convention on Biological Diversity is to adopt measures to promote a wide range of activities to safeguard biodiversity, including such techniques as *ex situ* (Article 9) and *in situ* conservation of biological diversity, especially of threatened or endangered species. In Colombia botanic gardens are relevant to the implement of the Biodiversity Convention Articles as follows:

- Article 6. General Measures for Conservation and Sustainable Use
- Article 7. Identification and Monitoring
- Article 8. *In situ* Conservation
- Article 9. *Ex situ* Conservation
- Article 10. Sustainable Use of the Components of Biological Diversity
- Article 12. Research and Training
- Article 13. Public Education and Awareness
- Article 15. Access to Genetic Resources (and benefit sharing)
- Article 17. Exchange of Information
- Article 18. Technical and Scientific Cooperation

Colombia ratified the Convention on Biological Diversity through Law 165 of 1994, and the Colombian Congress and Government have passed important legislative acts relating to its implementation. One of these was a Botanical Gardens Law, passed by Congress as law 299 of 1996 and possibly the first law for botanic gardens worldwide. This law has declared botanic gardens a priority in the environmental agenda, and recognized the important role they are expected and obliged to play in safeguarding national biodiversity. The Botanical Gardens Law also calls for an action plan to be developed by the Ministry of the Environment, the National Botanic Gardens Network and the Alexander von Humboldt Institute. This plan was therefore developed during and subsequent to a week-long workshop held in 1996 which included participants from all the botanic gardens of Colombia, several international botanical gardens associations (including Botanic Gardens Conservation International) and representatives of other environmental sectors in Colombia. The strategic planning exercise included an analysis of the current strengths, weaknesses, advantages and threats to botanic gardens. This project was highlighted as one of the most important priority areas that needed to be developed to enhance botanic gardens effectiveness as biodiversity conservation centres. The project will assist Colombia in meeting its obligations in the implementation of the Convention by:

- * Enhancing the role of Colombian botanic gardens in conservation;
- * Ensuring that information on biodiversity collections is effectively managed and available to those engaged in its conservation;
- * Providing training to a range of conservation and botanical professionals in Colombia and thus enhancing their capacity to undertake conservation;
- * Promoting wider cooperation and technical exchanges (data, technology and personnel) between a wide range of institutions involved in biodiversity conservation in Colombia.

2.2 In what ways can this project be considered a Darwin project? How does the project relate to the Darwin principles? How would the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

This project is a collaborative one, drawing on British expertise provided by BGCI and linking with major biodiversity conservation organizations in Colombia, in one of the biodiversity richest countries in the world.

Botanic gardens in Colombia contain very significant plant collections of native and other economically important plants, valuable for agricultural, forestry, industrial, medicinal, ornamental and other purposes. Such collections are of considerable potential importance for national sustainable development. Development of efficient information on such collections will help to ensure that they become available as natural resources for such purposes.

All training workshops will be entitled Darwin Initiative Training Workshops. The Darwin Initiative logo will be used in all publications produced as part of the project and on articles publicizing its work. The logo will be affixed to all computer equipment purchased. Darwin Initiative support will be acknowledged in the internet home pages produced as part of the project.

This project cannot go ahead without funding from the Darwin Initiative.

2.3 Give the proposed starting date and duration of the project

The project would commence in April, 1998.

2.4 Give brief details of the main objective(s) of the project

The main objectives of the Darwin Initiative on Plant Conservation and Information Management for Botanic Gardens in Colombia are to:

- * Develop an information management strategy for botanic gardens, through a series of workshops to assess user needs.
- * Develop appropriate computer software for collections and information management, taking advantage of other experiences, such as the BG-RECORDER, developed as part of Darwin Initiative support elsewhere.
- * Build capacity for information management in botanic gardens, through new hardware and communications facilities for botanic gardens and training of personnel.
- * Assess and monitor botanical collections held in botanic gardens in Colombia, as a result of the activities described above.
- * Strengthen botanical collections of endangered plants of Colombia, through training in field collection and management.
- * Strengthen the Botanic Gardens Network in Colombia, through institutional support.

2.5 Set out in greater detail the proposed programme of work for which grant is sought. Include the programme's aims and measurable objectives using the attached list of output measures. Give the estimated timing of the achievements.

This proposal is designed to strengthen the role and activities of botanic gardens (individually and collectively) in the conservation and sustainable use of plant diversity in Colombia, in a collaborative effort between Botanic Gardens Conservation International (UK), the Alexander von Humboldt Institute (Colombia) and the Red Nacional de Jardines Botánicos (Colombia).

Proposed actions:

Establishment of computer-based information management systems for Colombian Botanic Garden collections

Computer-based information systems will be established in each of the sixteen Colombian botanic gardens. Computer software in Spanish will be installed and technical staff will be trained in its use through a series of three annual regional workshops.

Training Outputs 6A - 15 (Year 1); 15 (Year 2); 15 (Year 3). Total staff trained 45. 6B: one week training per person.

Research Outputs 12A: 17 computer databases established.

Physical Outputs 20: Estimated value of computers and software handed over to host country - £40,000

Hold a series of three strategic planning workshops for the heads of all the botanic gardens in Colombia.

The role of these workshops will be to:

- * explain the project and gather information on current capacities and needs
- * give special emphasis to raising awareness and an understanding of the importance of the Convention on Biological Diversity and the role of botanic gardens for its implementation.
- * bring together representatives from the botanic gardens with other actors that are relevant for their work, such as decision makers at the national and regional level, scientists and non-government organizations, among others.
- * ensure that information management is placed at the heart of botanic garden operations.
- * strengthen on-going cooperative linkages between botanic gardens nationally through the Colombian Botanic Garden Association.

Training Outputs 6A: 30 (Year 1); 30 (Year 2); 30 (Year 3). Total staff trained 90. 6B: one week training per person.

Publication of A National Information Management Strategy for Botanic Gardens.

The workshops will be used to prepare a national information management strategy, focusing on information priorities, policies for exchange of botanical material and information, and capacity building needs, including measurable goals and targets, so that progress in implementation of this strategy can be assessed at any point during the implementation phase.

Research Outputs 9: One national strategy document produced.

Preparation of computer software for collections management and appropriate training and technical manuals in Spanish .

A Spanish language version of the BGCI software, BG-RECORDER will be prepared, using the software platform Microsoft Access. A Spanish language version of the *International Transfer Format for Botanic Garden Plant Records* (ITF) will be published and distributed. This will be an important training aid.

Training Outputs 10: Publication of one computer software programme and one technical manual.

Coordination and monitoring of botanic garden biodiversity collections

Botanic garden collections in Colombia are poorly documented. Through the project an inventory of these collections will be initiated, focused particularly on native plants that are rare and endangered and other taxa that are relevant to national sustainable development. A target of 20,000 accessions will be set for inclusion in the information system on completion of year 2 and 50,000 on completion of year 3.

Research Outputs 13B 16 biodiversity collections of Colombian native plant species enhanced.

Establish on-line electronic communications between each botanic garden in Colombia and with national and international collaborators.

Email and internet access will be established for each of the 16 botanic gardens (including homepages). These connections will be used to aid regular data exchanges (using the ITF) and communications with the three project partners and other relevant institutions nationally and internationally.

Dissemination Outputs 17 internet homepages established

Establishment of a national decentralized botanic garden database.

This database will be created by the Botanic Garden Association, networking each of the 16 individual botanic garden databases as a single coordinated overview system to enable the botanic gardens to contribute efficiently to the National Colombian clearing house mechanism. This activity will include the establishment of internet homepages for the Botanic Garden Association.

Research Outputs 12A: 1 coordinating computer databases established.
17B: 1 National network of botanic gardens enhanced.

Research Outputs

8: 3 weeks (minimum) per annum spent by UK project staff in Colombia

Financial Outputs

23: Value of resources raised from other sources for project work - Staff in-kind support and technical assistance (U.K.) - [redacted] (Colombia) [redacted]

Estimated Timing of Achievements

Year 1 Prepare computer software in Spanish; Establish 8 computer systems for Colombian botanic gardens; Hold a national strategic planning workshop; Hold 3 regional training workshops; Publish a National Information Management Strategy for Botanic Gardens; Begin coordination and monitoring of botanical collections; Establish national decentralized botanic garden database.

Year 2 Establishment of 8 computer systems for Colombian botanic gardens; Hold a national strategic planning workshop; Hold 3 regional training workshops; Publish a Spanish language version of the ITF; Continue coordination and monitoring of botanical collections; Register 20,000 accessions in the computer databases; Establish Email and internet access for 8 botanic gardens.

Year 3 Hold a national strategic planning workshop; Hold 3 regional training workshops; Continue coordination and monitoring of botanical collections; Register 30,000 accessions in the computer databases; Establish Email and internet access for 8 botanic gardens

2.9 How is the work of the project expected to continue after the end of grant period. A clear exit strategy must be included.

This project has been designed with a clear completion date. The databases and information systems developed and implemented during the project will become core operational parts of the on-going work of each of the institutions involved.

2.10 Which overseas institution, if any, will be involved in the projects? Please explain the responsibilities of these institutions and provide details on the individuals who will be involved in the project.

The collaborating institutions for the project will be the Instituto Alexander Von Humbolt (Colombia) and Red Nacional de Jardines Botanicos (Colombia).

The Alexander von Humboldt Institute was established in 1995, as part of the restructuring of the environmental sector in Colombia in response to the implementation of the Convention on Biological Diversity. The Institute is affiliated to the Ministry of the Environment, and is a joint venture between a group of 24 institutions, including government agencies, universities, other research institutes and non-government organizations. Its mission is to promote, coordinate and carry out research that contributes to the conservation and sustainable use of biological diversity in Colombia. This is done through four main research programmes: biological inventories, conservation biology, use and valuation and policy and legislation. In addition, the institute has two cross-cutting programmes for training and information.

The project responsibilities of the Institute will be to provide the technical assistance for this project. The Institute sponsored a first workshop with all the botanical gardens, and the results are the basis for the national strategy that led to this proposal. The Institute is also the National Focal Point for the clearing-house mechanism of the Convention on Biological Diversity, and will be in charge of coordinating this project's activities with other initiatives (eg. herbaria, protected areas) and providing the necessary links to decision makers. The project will have the involvement and support of Dr Cristian Samper, Director of the Institute and the research and administration staff of the institute (50 people, list available).

The Red Nacional de Jardines Botánicos de Colombia is a network of the 16 botanic gardens of Colombia. The mission of the network is to strengthen the capacity of the botanic gardens in plant conservation, scientific research and environmental education. It is also in charge of the implementation of the botanical gardens national strategy.

The project responsibilities of the Red Nacional will be to coordinate the activities of the individual gardens, coordinate the workshops and monitor the implementation of the information management plan. These activities will be under the supervision of the President of the Network, Dr Alberto Gomez Mejia, who will be the main contact person for this project. Individual gardens will also support this project through the involvement of their staff in the project (16 people, list available).

2.11 Do you know of any other individual/organisation carrying out similar work? Give the details of the work, explaining the similarities and difference.

No other individual or organisation is carrying out similar work in Colombia in botanic gardens.

There is another initiative on developing information management systems for herbaria and zoological collections in museums, coordinated by the Humboldt Institute. These activities will be complementary and strengthen the collaboration between botanic gardens, universities and other research institutions.

2.6 Is this a new project or the continuation of an existing one?

This is a new project

2.7 Will the project include an element of training? Please indicate how many trainees would be involved and from which countries. Would those trained then be able to train others? Where appropriate give the length of any training course. Broadly how many local people will be involved? How will trainee outcomes/destinations be monitored after the end of the training?

The project will include a series of three national workshops of one week in duration (one each year) and 9 regional workshops of three days in duration (3 each year). During these training will be provided in information management, computer database systems, electronic communications, the development of biodiversity management protocols for botanic gardens, plant conservation programmes and relevant aspects of general botanic garden management and development that relate to enhancing capacities for biodiversity conservation. Approximately 45 trainees will receive direct training as part of the project each year and each will subsequently provide in-service training to a further 80-100 botanic garden staff. All trainees will be Colombian nationals. Post project monitoring of the training outcomes will be undertaken by the project partners by the maintenance of on-going liaison with the botanic gardens involved in the project.

2.8 [If applicable] How is the research element of the project to be disseminated?

Not applicable

3. MONITORING AND EVALUATION

Describe how progress on the project will be monitored and evaluated in terms of achieving its aims and objectives, both during the lifetime of the project and its conclusions. How would you ensure that it achieves value for money? What arrangements will be made for disseminating results? If applicable, how will you seek the views of clients/customers?

The project will be evaluated using action-research methodology and will ensure that all comments are fed back into the project. Reports on the workshops will also be produced and will be sent to all participants in the project. The workplan and timetable for the implementation of the programme of activities will be reviewed at 6-monthly intervals to ensure that sufficient progress is being made and deadlines achieved. At least one planning and evaluation visit will be made by the BGCI Project Leader each year and on-going monitoring and evaluation will be conducted by the Project Manager in Colombia reporting regularly to a steering committee drawn from the project partners. The training and strategic planning workshops will be evaluated by the participants by questionnaire and interview so that improvements and refinements can be achieved for each new workshop. Training programmes based in Colombia will be much more cost effective than arranging training in the U.K. The results of the project will be disseminated widely through the publications produced and through the internet home pages of the project partners and the individual botanic gardens involved.

4. INCOME

4.1 What financial support from public sources (Government Department or Agency) does the organisation as a whole receive at present, and from which organisations? What percentage is this of the organisation's total income?

Several U.K. government supported botanic gardens are subscribing members of BGCI, including the Royal Botanic Gardens, Kew and the Royal Botanic Garden, Edinburgh, both of whom contribute [REDACTED] annually towards BGCI's core costs.

BGCI annual income is approximately derived from the following sources:

Membership subscriptions [REDACTED]

Foundations, Trusts and other donations [REDACTED]

Corporate sponsorship [REDACTED]

Overheads on projects and contracts on behalf of other organizations and agencies [REDACTED]

The core (non-project) income and expenditure of BGCI is approximately [REDACTED] per annum.

4.2 Please give details of resources you have sought from the host country partner institution.

Resources provided by the host country partner institutions are as follows:

The Alexander von Humboldt Institute will provide the technical support necessary for this project. This includes expertise in plant taxonomy and systematics, as well as information management specialists. The Red de Jardines Botánicos will provide a linkage to the gardens, including staff for the project in each garden (16) and also coordinate local activities.

4.3 Please state other sources of income and amounts to be put towards the costs of the project (including any income from private sponsorship, trusts, fees or trading activity). Include donations in kind eg. accommodation. Indicate any income or donations which are confirmed.

BGCI will donate its computer software package to the project free of charge. Other resources including the *International Transfer Format for Botanic Garden Plant Records*, publications and newsletters and additional technical staff involvement (not included in the budget) will be donated as in-kind support. The value of such BGCI donations can be calculated as [redacted] over the duration of the project. Support for some air travel will be sought from British Airways but cannot be confirmed at this time. Such amounts have not been included in the budget.

5. EXPENDITURE

5.1 Please state expenditure on the programme of work (see 2.6) Please work by financial year, using 1997/98 prices throughout - do not include any allowance for assumed future inflation. Indicate salary costs on Table A and total costs on Table B. For programmes of less than 3 years' duration, enter 'nil' as appropriate for future years.

Table A

	1998/1999	1999/2000	2000/2001
Number of staff - list each member			
a) UK			
1 Dr P Wyse Jackson Project Co-ordinator			
2 Fiona R. Dennis Technical Officer			
3 Diane Wyse Jackson Computer Consultant			
b) Collaborators			
1 Project manager (To be decided)			
2 Institutional collaborators (16) (List available)			
3 Technical Officers Eduardo Calderon Cristian M. Pedraza			

% of time each would spend on this work			
Project Co-ordinator			
Technical Officer			
Computer Consultant			
Project Manager			
Institutional Co-ordinators (16)			
Plant Taxonomist			
Computer Analyst			
Cost of this work			

Expenditure on other costs and then the total costs should be listed as below:


Table B

	1998/99	1999/2000	2000/2001
Rents, rates, heating, lighting, cleaning			
Postage, telephone and stationary			
Travel and subsistence			
Printing			
Conferences, seminars etc			
Capital items computers for project			
Other (please specify)* Insurance & maintenance INTERNET subscriptions			
Sub-total			
Cost of salaries (from previous table)			
Total of spend*			

* Grants may be limited to a percentage of the total cost of the project. The Department will look for balancing income from non-public sources (eg. private sector funding, subscriptions, donations, fees).

5.2 Please deduct any confirmed income or donations from elsewhere (where this may be costed) and indicate in Table C the amounts of grant requested under the Darwin Initiative.

TABLE C

	1998/1999	1999/2000	2000/2001
Income to be deducted			
Amount of Darwin Initiative funding requested			

The total estimated cost of the project over three years is £167,450.

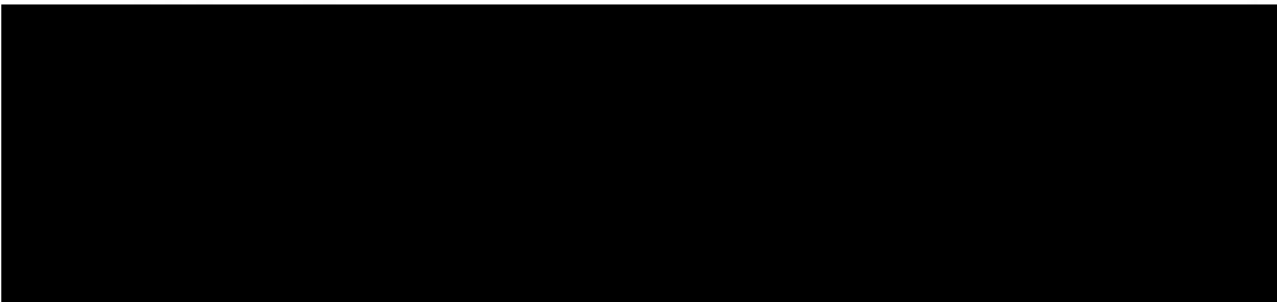
6. CERTIFICATION

On behalf of the trustees/company..Botanic Gardens Conservation International

I apply for a grant of £60,125 in respect of expenditure to be incurred in the financial year ending 31 March 1999 on the activities specified in paragraph 2.6.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct.

I enclose a copy of the organisation's most recent audited accounts and annual report.



Please return completed form to the Department of the Environment, A304 Romney House, Marsham Street, London SW1P 3PY.

Department of the Environment
September 1997